**SONY.** 3-755-628-**22**(1)

# **Tuner Timer Unit**

# TGV-3

# **Operating Instructions**

Before operating the unit, please read this manual thoroughly and retain it for future reference.





# **WARNING**

# To prevent fire or shock hazard, do not expose the unit to rain or moisture.





This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

For detailed safety precautions, see the leaflet "IMPORTANT SAFEGUARDS."

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

#### NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device. pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no quarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### Owner's Record

The model and serial numbers are located on the bottom. Record the serial number in the space provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. TGV-3

Serial No.

#### Note to CATV system installer:

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Television programs, films, video tapes and other materials may be copyrighted. Unauthorized recording of such material may be contrary to the provisions of the copyright laws.

# **Precautions**

#### Operation

- Should any solid object or liquid fall into the cabinet, unplug the unit and have it checked by qualified
  personnel before operating it any further.
- · Avoid rough handling or mechanical shock to the unit.
- . Do not wrap up the unit and operate it because heat may build up internally.
- Avoid using and storing the unit in the following locations:
  - susceptible to vibration
  - exposed to strong magnetic fields
  - near TV or radio transmitters where strong radio waves are generated
  - on the sand

#### Care

Clean the unit body with a dry, soft cloth, or a soft cloth lightly moistened with a mild detergent solution.
 Do not use any type of solvent which may damage the finish.

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# Overview of the TGV-3

The TGV-3 is a tuner timer unit designed to be used with the GV-S50 8mm video recorder/monitor.

By connecting the GV-S50 8mm video recorder/monitor

- You can watch TV programs. (page 18)
- You can record TV programs. (page 24)

#### **Features**

- Easy-to-use menu screen function
- Timer-activated recording
- SLEEP TIMER for turning off the unit automatically

### Menu Screen

The TGV-3 is equipped with a menu screen function. You can perform certain operations on the menu screen.

The TUNER MENU appears on the screen of the GV-S50 8mm video recorder/monitor when you press MENU. Select the desired item on the TUNER MENU screen. For more details, see reference pages in the table below.

#### Menu screen

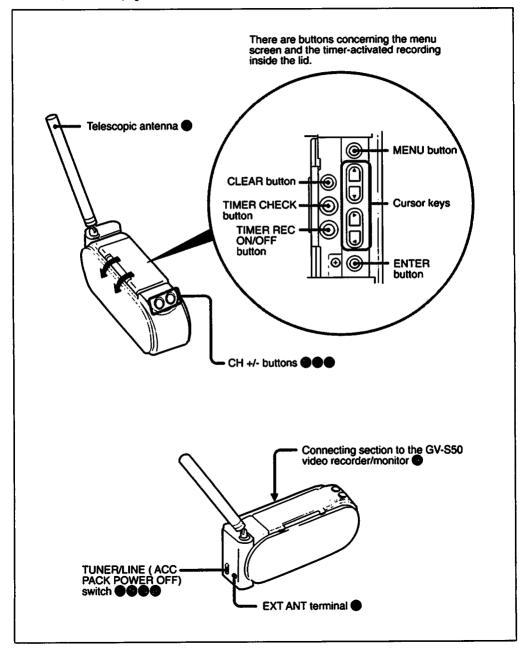
Menu item	Setting purpose	Reference page
TIMER SET	To preset timer-activated recordings	26 - 28
SLEEP TIMER	To turn off the unit automatically after a certain time	22
CHANNEL	To determine how to get a channel (DIRECT or SEEK)	20 – 21
CLOCK SET	To set the date and the time	11 – 12
TUNER PRESET	To preset TV channels	13 – 15

#### Note

The TUNER MENU does not appear while recording or playing back a tape on the GV-S50 video recorder/monitor.

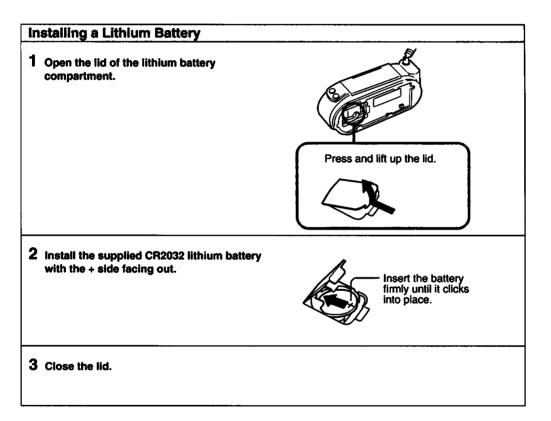
# **Location of Parts and Controls**

For details, refer to the pages indicated in circles.



# **Power Sources**

The TGV-3 automatically turns on and off when the GV-S50 video recorder/monitor turns on and off. The power for this unit is supplied from the GV-S50 video recorder/monitor. You do not have to connect any power source to the TGV-3 itself except a lithium battery which powers the clock and keeps the last channel in memory when the GV-S50 video recorder/monitor turns off.



### To remove the lithium battery

Push the battery forward and remove it as illustrated.



## **Power Sources**

#### Lithium battery life

Approximately one year in normal operation.

If the lithium battery becomes weak, the message "CLOCK SET" appears when you select the TIMER SET menu. But even though you select the CLOCK SET menu. the "12:00AM" indication appears and the clock does not operate.

In this case, replace the battery with a Sony CR2032 lithium battery. Use of another battery may present a risk of fire or explosion. After replacing the battery, readjust the clock.

#### Cautions

- Keep the lithium battery out of the reach of children. Should the battery be swallowed, consult a
  doctor immediately.
- Before use, wipe the battery with a dry cloth to assure a good contact.
- Be sure to observe the correct polarity when installing the battery.
- . Do not hold the battery with metallic tweezers, as that may cause short-circuit.
- Do not break up the battery or throw it into a fire because it may explode. Carefully dispose of the used batteries.

#### Warning

Battery may explode if mistreated. Do not recharge, disassemble or dispose of in fire.

# Connecting the GV-S50 Video Recorder/Monitor

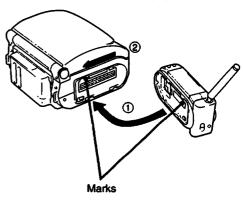
### Attaching the GV-S50 Video Recorder/Monitor

1 Remove the cover while sliding the RELEASE lever in the direction of the arrow (—).



3

2 Align the marks of the connecting sections of this unit and the GV-S50 as illustrated (①), then slide this unit backward until it clicks (②).

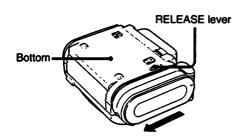


#### Note

When this unit is not connected to the GV-S50, be sure to attach the cover to the connecting section of the GV-S50 to prevent damage.

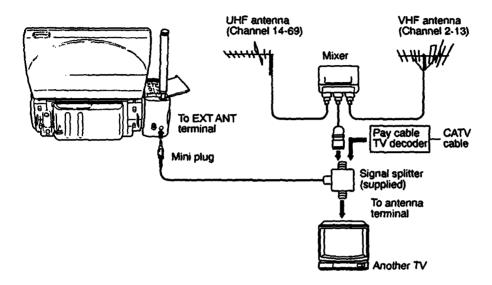
### To remove the GV-S50 video recorder/monitor

Pull this unit forward while sliding the RELEASE lever in the direction of the arrow (---).



# Connecting an Outdoor Antenna and CATV cable

If you cannot obtain satisfactory reception with the telescopic antenna, or when recording TV programs, use an outdoor antenna. For viewing CATV channels, connect the CATV cable.



#### Note

- · Before connecting the antennas, turn off the unit.
- Make connections firmly. A loose connection may cause a distorted picture.
- When using the unit in a car, use the optional VCA-3W or VCA-4E car antenna, etc. For details, refer to the operating instructions of the car antenna.

# **Setting the Clock**

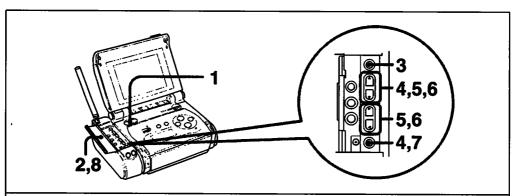
#### **Before setting**

Check the following points:

- Is the lithium battery installed correctly? (page 7)
- Is this unit connected to the GV-S50 video recorder/monitor? (page 9)
- Is the TUNER/LINE switch set to TUNER?

The built-in clock of this unit uses the 12-hour system.

0:00AM stands for midnight and 0:00PM for noon.

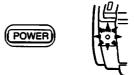


### Example: Set to 1:15PM, July 4, 1992

1 Press POWER of the GV-S50 video recorder/ monitor.

This unit turns on simultaneously.

The POWER lamp on the front panel of the GV-S50 lights up.

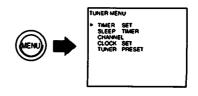


2 Open the lid.

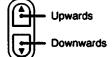


3 Press MENU.

The TUNER MENU display appears on the screen of the GV-S50.

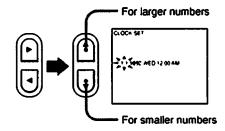


4 Press ▲ or ▼ of the cursor keys to move the cursor (►) down to CLOCK SET, and press ENTER.





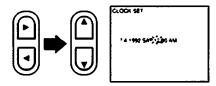
5 Set the month, day, and year in this order. Press ◀ or ▶ to make the item to be set flash, and press ▲ or ▼ until the desired number appears.



- The day of the week is automatically displayed.
- This unit incorporates the calendar until the year 2007.
- 6 Set the hour and minute.

Press ◀ or ▶ to make the item to be set flash, and press ▲ or ▼ until the desired number appears.

Be sure to set AM and PM correctly.



7 Press ENTER.

The clock starts and the normal screen resumes.



8 Close the lid.

### To reset the clock

Repeat steps 3 to 7.

#### Note

If the lithium battery is not installed, the clock will be reset each time you disconnect the GV-S50 from this unit.

# **Presetting TV Channels**

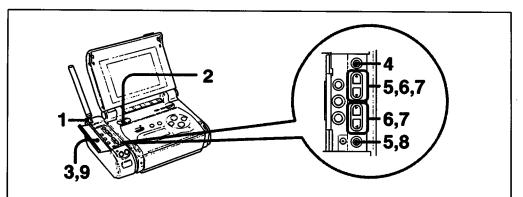
# **Presetting Channels**

Receivable channels of this unit are:

VHF: 2-13 UHF: 14-69

CATV: 1 (A-8), 98 (A-2), 99 (A-1), 14-36 (A to W), 66-125 (W+30 to W+84).

This unit is preset at the factory to receive certain channels (see chart on page 15). If you want to receive other channels, you need to preset them. Up to 99 channels can be allocated to any desired program position.



1 Set the TUNER/LINE switch on the rear of this unit to TUNER.



2 Press POWER of the GV-S50 video recorder/monitor. This unit turns on simultaneously. The POWER lamp on the front panel of the GV-S50 lights up.





3 Open the lid.



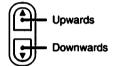
# Presetting TV Channels

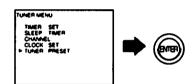
4 Press MENU.

The TUNER MENU display appears on the screen of the GV-S50.

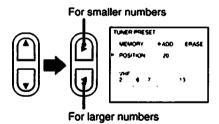


5 Press ▲ or ▼ of the cursor keys to move the cursor (►) down to TUNER PRESET, and press ENTER.





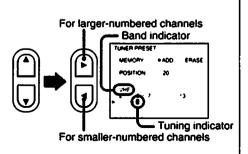
6 Press ▲ or ▼ of the cursor keys to move the cursor (►) down to POSITION, and press ◄ or ► to select the desired program position where the channel is to be stored.



7 Press or or of the cursor keys to move the cursor (►) down to the channel range display, and press or ► repeatedly until you get the desired channel.

The UHF channel range is displayed after the VHF range.\*

Repeat steps 6 and 7 for other channels to be preset.



<sup>\*</sup> After the channel range is displayed, wait for about two seconds before next operation.

### 8 Press ENTER.

Channel presetting is completed. The on-screen display disappears.



9 Close the lid.

# To change the order of the channels to be stored

Follow the above steps.

#### Preset channels

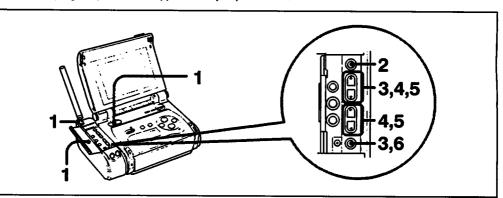
Program position	1	2-13	14-36	37	3860	61	62-97	98	99
Corresponding channel	CATV 1	VHF 2-13	CATV 14-36	*	_	•	_	CATV 98	CATV 99
Number displayed	1	2–13	14–36	37		61	_	98	99

UHF channels are preset around this number.

<sup>-</sup> Channels are not preset.

## **Erasing Program Positions**

The erased program position is skipped when you press CH +/-.

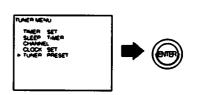


- 1 Proceed steps 1 to 3 of "Presetting Channels" on page 13.
- 2 Press MENU.
  The TUNER MENU display appears on the screen of the GV-S50.

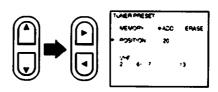


3 Press ▲ or ▼ of the cursor keys to move the cursor (►) down to TUNER PRESET, and press ENTER.



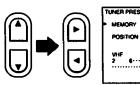


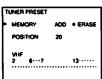
4 Press ▲ or ▼ of the cursor keys to move the cursor (►) down to POSITION, and press ◄ or ► to select the program position to be skipped.



5 Press ▲ or ▼ of the cursor keys to move the cursor (►) down to MEMORY, and press ◄ or ► to select ERASE.

Repeat steps 4 and 5 for other program positions to be skipped.





6 Press ENTER.

The on-screen display disappears.



To add the erased channels again

See "Presetting Channels" on page 13.

### **Channel Allocation Chart**

Frequency (MHz)		50	100	150	200	250	300	400	500	600	700	800
VHF/UHF channels		VHF 2-6			VHF 7-13					UHF 14-69		
CATV channels	A8 A6			2~1	I J~W				W + 30-W + 84			
Band indicator	Τ			VH	F					UHF	:	

When you press CH +, the above channel will be scanned from the lowest frequency to the highest in sequence. By pressing CH -, the channels will be scanned in reverse.

### **Cable TV Channel Chart\***

Cable TV systems use letters or numbers to designate channels. To tune in a channel, refer to this chart. Check with your local cable TV company for more complete information on the available channels.

Nu	mber	on thi	s unit			1	98	99	14	15	16	17	18	19	20	21	22
Co	Corrsponding CATV channel					A-8	A-2	A-1	Α	В	С	D	Е	F	G	Н	工
23	24	25	26	27	28	29	30	31	32	33	34	35	36			<del></del>	
J	K	L	М	N	0	P	Q	R	S	T	U	٧	W	W	+30	W	+84

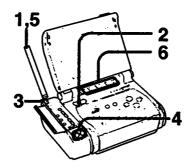
<sup>\*</sup> The designation of the cable TV channels conforms to the EIA/NCTA recommendation.

### Note

Pay cable TV systems use scrambled or encoded signals and require special converters (decoders) besides the normal cable connections.

# **Watching TV Programs**

## **Viewing a Preset TV Program**



- Pull out the telescopic antenna fully.
  Be sure to pull out the base of the telescopic antenna.
  If you have connected an external antenna or CATV cables, be sure to fold in the telescopic antenna.
- 2 Press POWER of the GV-S50 video recorder/monitor. This unit turns on simultaneously. The POWER lamp on the front panel of the GV-S50 lights up.



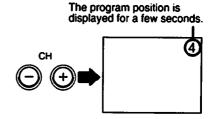


3 Set the TUNER/LINE switch to TUNER, if a TV program is not displayed.

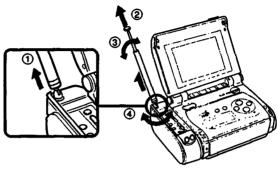


4 Select the desired program.

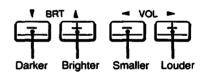
Press CH + for higher-numbered programs and CH – for lower-numbered programs. The programs appear in numerical sequence. Press CH +/- repeatedly until you get the desired program on the screen.



5 Adjust the telescopic antenna for the best reception.



6 Adjust the volume and brightness. Press BRT +/- and VOL +/- on the GV-S50 video recorder/monitor.



#### To turn off the TV

Press POWER of the GV-S50 video recorder/monitor. The POWER lamp on the front panel of the GV-S50 goes out.





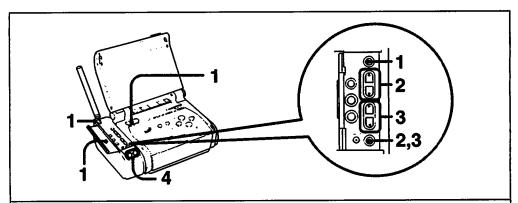
To pull the telescopic antenna away

Slide in the base of the telescopic antenna first, then the center and the point.

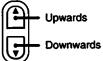


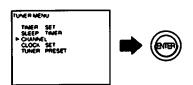
# **Viewing a TV Program Without Presetting Channels**

When you do not know the channel number of the TV program you wish to view or if you want to use this unit in a moving car, search for the program as follows.

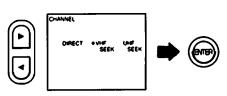


- 1 Proceed steps 1 to 4 of "Presetting Channels" on page 13.
- 2 Press ▲ or ▼ of the cursor keys to move the cursor (►) down to CHANNEL, and press ENTER.





3 Press ◀ or ▶ of the cursor keys to select VHF SEEK or UHF SEEK, and press ENTER.



4 Press CH +/- buttons to select the channel.

Press the buttons repeatedly until you get the desired program on the screen.

When you select

CH OT OT OT OT

When you select

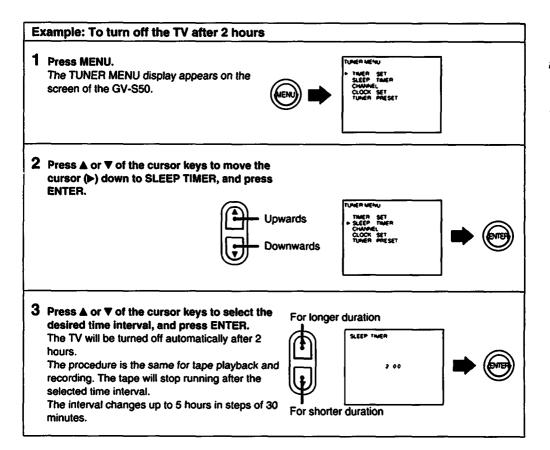
After selecting the channel, the channel range display goes out after a few seconds.

#### "Last channel" memory function

- While you are watching TV programs, if the power source is disconnected or the battery pack becomes exhausted, the unit turns off with the last channel being memorized.
   When you turn on the unit again, the last channel appears on the screen. The lithium battery must be installed for this function.
- The last channel memory function also works when the TV signal is cut off, for example, when you go through a tunnel in a moving car.
- If the lithium battery becomes exhausted but the power source is connected, the last channel memory function will still operate.

# **Using the SLEEP TIMER**

You can set the unit to turn off automatically after a certain amount of time, after as short as 30 minutes or as long as 5 hours, while viewing a TV program, tape playback, or while recording.



### To cancel the SLEEP TIMER

Press POWER of the GV-S50 to turn off the power of the video recorder/monitor.

(Even while playing back or recording a tape, you can cancel the SLEEP TIMER by turning off the power of the video recorder/monitor.)

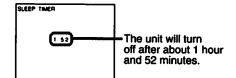


### To check the remaining time

Select SLEEP TIMER in the TUNER MENU display, and press ENTER.

The remaining time is displayed.

(You cannot check the remaining time while playing back or recording a tape).

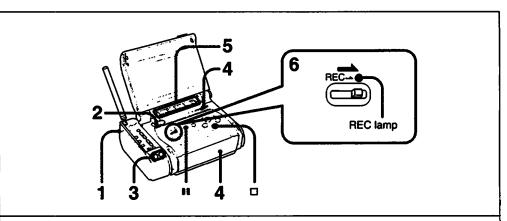


#### Note

When you use the unit with rechargeable batteries on the GV-S50, the unit may turn off before the selected time because the batteries are exhausted.

# **Recording TV Programs**

You can record a TV program while viewing it. For better picture and sound quality, connecting an external antenna is recommended.



1 Set the TUNER/LINE switch on the rear of this unit to TUNER.



2 Press POWER of the GV-S50 video recorder/monitor. This unit turns on simultaneously.

The POWER lamp on the front panel of the GV-S50 lights up.





3 Select the desired TV channel.



- 4 Insert a cassette.
- 5 Select the recording mode, SP or LP.
  Refer to the operating instructions supplied with the GV-S50 video recorder/monitor.
  The recording time of a cassette in the LP mode is twice as long as that in the SP mode. For better picture and sound quality, select the SP mode.

6 Slide REC to the right.

The REC lamp lights and the recording starts.



To stop recording

Press □.

To stop recording for a moment

Press II.

To resume recording

Press III again. (If III is not pressed again for about 5 minutes, the pause mode will be released automatically and the GV-

S50 will stop. This is to protect the video heads.)

When the tape is recorded to the end

The tape stops automatically, but the unit is not turned off. If you are not going to continue operation, turn off the power of the GV-S50.

About the recorded sound

The VOL control setting has no effect on the recording level.

To change the channel during recording

Set the unit in the recording pause mode and then select another channel. You cannot watch another program while recording.

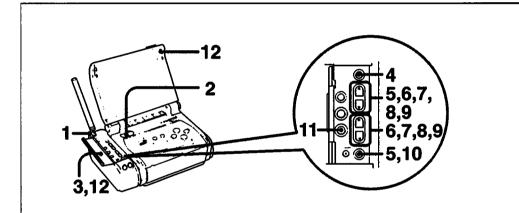
# **Timer-Activated Recording**

By using the timer-activated recording feature, you can preset the GV-S50 to record up to six TV programs within a one-month period.

For better picture and sound quality, connecting an external antenna is recommended.

#### Before setting the timer

- Is the GV-S50 correctly connected to this unit? (See page 9.)
- Make sure that the power is supplied. (Is the battery pack on the GV-S50 fully charged? For long recording, use of the AC power source is recommended.)
- Set the clock correctly. (See page 11.) If the clock is not set, the message "CLOCK SET" appears on the screen.
- Insert a tape correctly. Make sure that the safety tab is slid in. (Refer to the operating instructions of the GV-S50.)
- Note that you cannot set the timer while playing back or recording a tape on the GV-S50.



Example: To record a broadcast on program position 6, from 8:00PM to 8:45PM on Saturday, July 4, 1992, in SP mode

1 Set the TUNER/LINE switch on the rear of this unit to TUNER.



2 Press POWER of the GV-S50 video recorder/monitor.

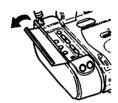
This unit turns on simultaneously.

The POWER lamp on the front panel of the GV-S50 lights up.



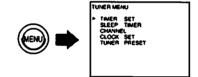


3 Open the lid.

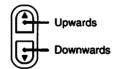


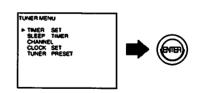
4 Press MENU.

The TUNER MENU display appears on the screen of the GV-S50.



5 Press ▲ or ▼ of the cursor keys to move the cursor (►) down to TIMER SET, and press ENTER.



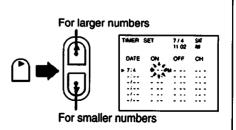


6 Set the date, starting time, and ending time.

Press ▶ of the cursor keys to make the item to be changed flash, and press ▲ or ▼ until the desired date or time appears. (Be sure to set AM and PM correctly.)

To change an item which is already set

Press ◀ or ▶ of the cursor keys to make the item
to be changed flash, and press ▲ or ▼ to change
it.

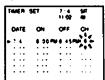


7 Select the program to be recorded.

Press ▲ or ▼ until the desired program position appears.

For larger program positions



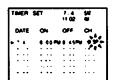


For smaller program positions

8 Select the tape speed.

Press ▲ or ▼ to select SP or LP.





9 Press ▶ to store the setting.

If you want preset another program, press ▼ to move the cursor (►) to the next line and repeat steps 6 to 9.



10 Press ENTER, or make sure that the cursor (>) is at the beginning of a line.



11 Press TIMER REC ON/OFF.

The TIMER REC lamp lights up and the GV-S50 turns off.





TIMER REG

12 Close the lid of this unit and the LCD of the GV-S50.

The recording starts automatically at the preset starting time and the power goes off at the preset ending time.

To stop the timer recording

Press the TIMER REC ON/OFF again.

The TIMER REC lamp goes out and the tape stops.

# **Timer-Activated Recording**

- If the starting time of one program comes before the recording of the other program is finished.
   The recording of program 2 begins before program 1 is finished.
- If the starting time of two programs are the same
   The program which is preset on the upper line in the TIMER SET display will be recorded and the other program will be cancelled.

#### Note

If the starting time of the second program is the same as the ending time of the first program, the last 20 seconds of the first program will not be recorded.

### While playing back or recording a tape

You cannot set the timer. Set the timer after stopping the tape.

### During timer recording standby mode

No buttons other than TIMER REC ON/OFF and TIMER CHECK are operable.

### **During timer recording**

If you want to watch the picture, open the LCD.

### To record to the end of the tape

Set the starting and ending time the same. When the tape reaches the end, recording will stop and the power goes off.

# If you detach this unit from the video recorder/monitor during timer recording or timer recording standby mode

The timer settings will be canceled even if you attach this unit to the video recorder/monitor again.

# If a power interruption occurs or the power is disconnected when using the video recorder/monitor with the AC power source

- During timer recording
  - Timer recording stops. Even if the power is resupplied, recording does not resume.
- · During timer recording standby mode
  - Even if the power is resupplied, the timer function does not work.

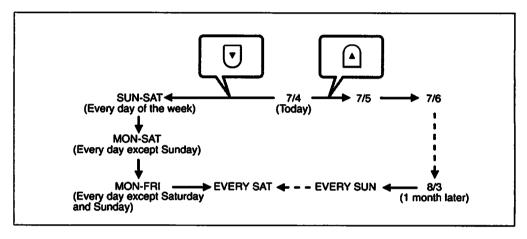
Press TIMER REC ON/OFF again to resume the timer function.

# **Every Week Recording and Every Day Recording**

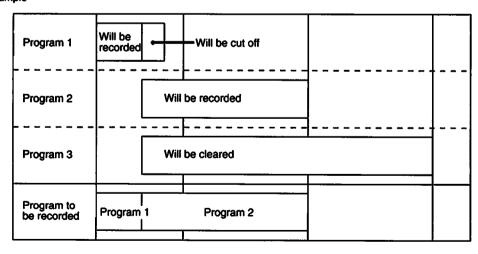
You can preset to record the same program every day or the same program on a specific day of every week.

When you set the date, press ▲ or ▼, and the indication will change as follows:

For every week recording or every day recording, press ▼ to set the date quickly.



### When the presettings of timer recordings overlap Example



Program 1: The recording will stop before the program finishes.

Program 2: The program will be recorded completely.

Program 3: The presetting will be canceled.

# **Checking the Contents of Preset Timer Setting**

# When the unit is in timer recording standby mode or in stop mode

Press TIMER CHECK. The TIMER CHECK display showing the preset timer settings will appear on the screen. If the unit is turned off, turn on the unit, then press TIMER CHECK. The TIMER CHECK display will appear.

TIMER CHECK

Timer Check 77.4 Set 11-02 all DATE ON OFF CH 11-02 Set 11-02 Set

To turn off the TIMER CHECK display, press TIMER CHECK again.

#### Note

You cannot check the contents of timer settings while the timer recording is being executed.

### **Changing the Timer Settings**

### When the unit is in timer recording standby mode

- 1 Release the timer recording standby mode by pressing TIMER REC ON/OFF.
- 2 Turn on the GV-S50.
- 3 Preset timer again. (See the procedures on pages 26 to 28.)

#### Note

You cannot change the timer settings while the timer recording is being executed.

# **Canceling the Timer Settings**

Release the timer recording standby mode by pressing TIMER REC ON/OFF.

Turn on the GV-S50 and select TIMER SET in the TUNER MENU display. In the TIMER SET display, press ▲ or ▼ of the cursor keys to move the cursor (►) to the setting to be cleared and press CLEAR. The setting will be cleared and "-/---:---" indication resumes.

# **Operating the Unit After Setting the Timer**

- 1 Press TIMER REC ON/OFF.
  The TIMER REC lamp goes off.
- 2 Operate the unit.
- 3 After using it, press TIMER REC ON/OFF to turn on the TIMER REC lamp. The unit turns off and enters timer recording standby mode.

# **Specifications**

**Tuner section** 

Channel coverage VHF: 2-13 channels

UHF: 14-69 channels

Cable TV channels: (A-8-A-6), (A-2-W), (W+30-W+84)

Antenna input 75-ohm minijack for VHF/UHF

**Timer section** 

Clock Crystal lock
Time indication 12-hour cycle

Timer setting Only for recording, 6 events/month

General

Power requirements Power is supplied from the GV-S50 video recorder/monitor.

Power consumption 1.3 W

Operating temperature  $0^{\circ}\text{C}$  to  $40^{\circ}\text{C}$  (32°F to  $104^{\circ}\text{F}$ ) Storage temperature  $-20^{\circ}\text{C}$  to  $60^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$  to  $140^{\circ}\text{F}$ ) Dimensions  $34.5 \times 64.5 \times 121.5$  mm (w/h/d)

 $(1^{3}/_{8} \times 2^{5}/_{8} \times 4^{7}/_{8} \text{ inches})$ 

Mass Approx. 170 g (6 oz)

Design and specifications are subject to change without notice.

# Troubleshooting

If you have a problem with this unit, first check the power supply source of the GV-S50, then go through the list below before calling the Sony service facility. Should the problem persists, consult your Sony service facility.

	Symptom	Possible causes and/or corrections
	The picture is muted.	The TUNER/LINE switch is set to LINE.  → Set the switch to TUNER. (page 18)
2	The picture is not clear.	The signal is weak.  → Adjust the telescopic antenna for the best reception or connect an outdoor antenna. (page 19)
	Double images or ghosts appear.	Reflections from nearby mountains or buildings often cause this problem. A highly directional antenna may improve the picture.
Clock	The clock shows "12:00AM".	Replace the lithium battery with new one. In this case, reset the clock (page 11), and if necessary, reset the timer recording.
	The TIMER SET display does not appear.	Set the clock. (page 11)
Timer recording	The timer recording feature failed to operate.	<ul> <li>The safety tab on the cassette was slid out. (Refer to the operating instructions of the GV-S50.)</li> <li>The tape was not long enough.</li> <li>TIMER REC ON/OFF was not pressed.</li> <li>The clock was not set correctly. (page 11)</li> <li>The battery pack on the GV-S50 was exhausted.</li> <li>There was a power interruption (for AC operation).</li> <li>Moisture condensation has occurred in the GV-S50.</li> </ul>
Others	This unit does not operate.	The GV-S50 is not connected firmly. (page 9)